

HONUL, Melania; ZASADZIEN, Zdzislaw

Shelter box for sedimentation jars for measurements of dust contamination of the air. Roczn panstw zakl hig 14 no.1:27-30 '63.

1. Voivodeship Sanitary and Epidemiological Station, Opole.

MAJEWSKI, Janusz; ZASADZIEN, Zdzislaw; PYSZ, Jozef

Smallpox in the Opole Province in 1963. Przegl. epidem. 18
no.2:197-204 '64.

1. Z Wydzialu Zdrowia i Opieki Spolecznej Prezydium Wojewodzkiej
Rady Narodowej w Opolu i z Wojewodzkiej Stacji Sanitarno-
Epidemiologicznej.

WANTUCHOWSKI, Jerał; ZASADZINSKI, J.

Conditions for producing rolled aluminum cables by means of
the Properzi process at the Skawina Aluminum Plant. Koh lap
96 no.12:534-538 D '63.

1. Banayaszati es Kohaszati Akademia, Krakow.

ZASANSKIY, V.V.

Achievements of innovators should be available to all workers.
Mashinostroitel' no.7#10-11 JI '64. (MIRA 17:8)

110197-66 EMP(m)/EMP(t)/EMP(b) LJP(c) JD
 ACC NR: AF5028456 SOURCE CODE: UR/0286/65/000/010/0019/0019
 AUTHORS: ⁵⁵Minicovich, M. A.; ⁵⁵Shneyerson, A. L.; ⁵⁵Filippova, Zh. M.; ⁵⁵Atroshchenko, V. I.; ⁵⁵Zasetskaya, A. P.; ⁵⁵Ivanovskiy, P. P.
 ORG: none
 TITLE: Method for obtaining nitric acid. ^{27.5}Class 12, No. 175492 [announced by State Scientific Research and Design Institute for the Nitrogen Industry and Products of Organic Synthesis (Nizhny Novgorod branch) (analogical) and by the Institute of Nitrogen Industry and Products of Organic Synthesis (Moscow branch)]
 SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 20, 1965, 19
 TOPIC TAGS: nitric acid, nitrogen oxide, nitrogen compound
 ABSTRACT: This Author Certificate presents a method for obtaining nitric acid at a pressure of 4-7 atm by absorbing gaseous nitrogen oxides in water in an absorption tray-type column. To obtain 68--80% nitric acid, liquid oxides of nitrogen are introduced into the column at a point below the formation of 50--63% nitric acid. The reaction may also be carried out by introducing air into the column at a point below which the liquid oxides of nitrogen are introduced.
 SUB CODE: 11/ SUBM DATE: 18Oct63/
 Card 1/1 UDC: 661.56

ZASHCHEPIN, A.N., kand.tekhn.nauk; CHERNIGOV, V.A., kand.tekhn.nauk

Vibration as an effective method for mixing concrete mixes. Avt.
dor. 24 no.2:12-13 P '61. (MIRA 14:3)
(Vibrators) (Mixing machinery) !

AUTHORS:

Korshak, V. V., Mozgova, K. K.,
Zasechkina, A. P.

SOV/79-29-10-48/60

TITLE:

The Influence of Low-Molecular Compounds on the Photo-chemical Destruction of Polyethylene Terephthalate (Vliyaniye nizkomolekulyarnykh veshchestv na fotokhimicheskuyu destruktsiyu polietilentereftalata)

PERIODICAL:

Zhurnal obshchey khimii, 1958, Vol 28, Nr 10,
pp 2847 - 2853 (USSR)

ABSTRACT:

In the paper under discussion, the conversion process of polyethylene terephthalate (Laysan) under the influence of the full irradiation by a lamp PTK-2 on this polyester, as well as of the closer spectral region within the limits of 300-320 mμ, was investigated. At the same time, an attempt was made to determine the influence of certain low-molecular compounds of various structures on the conversion process of polyethylene phthalate on full ultraviolet irradiation. The samples of this compound available to the authors did not yield fully uniform absorption spectra; they differed from those already published, due, probably, to the

Card 1/2

The Influence of Low-Molecular Compounds on the Photo-chemical Destruction of Polyethylene Terephthalate SOV/79-2840-48/60

difference in the composition of the polyester (Ref 6). The absorption spectra of the compounds enumerated are listed in the preceding report (Ref 7). The changes in the properties of the irradiated foils were determined from the changes in molecular weights, mechanical properties, and spectral characteristics. It was found that the decomposition of polyethylene terephthalate on full ultraviolet irradiation by the above mentioned lamp occurs far more intensively than on irradiation at a wave length of 300-320 mμ. The addition of low-molecular organic compounds to the polyethylene terephthalate affects its decomposition process. The results obtained harmonize with those arrived at under identical conditions on the decomposition of polystyrene. There are 6 figures, 1 table, and 8 references, 2 of which are Soviet.

SUBMITTED: August 5, 1957
Card 2/2

KORSHAK, V.V.; MOZGOVA, K.K.; SHKOLINA, M.A.; Prinimali uchastiye:
ZASECHKINA, A.P.; VOLKOVA, A.I.

Preparation of graft copolymers. Part 8. Vysokom.sped. 3 no.11:
1655-1660 N '61. (MIRA 14:11)

1. Institut elementoorganicheskikh sovedineniy AN SSSR.
(Nylon) (Styrene)

MORSHAK, V.V.; MOZGOVA, K.K.; SHKOLINA, M.A.; NAGDASIWA, I.P.;
BERESTNEV, V.A.; Prinimali uchastiye: YEGOROVA, Yu.V.;
ZASECHKINA, A.P.; VOLKOVA, A.I.; SAZONKINA, M.T.

Preparation of graft copolymers. Part 12. Vysokom.sped. 5
no.2:171-175 F '63. (MIRA 16:2)

1. Institut elementoorganicheskikh soyedineniya AN SSSR.
(Polymers)

ZASECHKINA, A. P.

44419
S/190/62/004/010/002/010
B144/B186

15.9000

AUTHORS: Korshak, V. V., Mozgova, K. K., Shkolina, M. A.,
Korostylev, B. M., Linovetskaya, O. Ya., Zasechkina, A. P.

TITLE: Synthesis of graft copolymers

PERIODICAL: Vysokomolekulyarnyye soedineniya, v. 4, no. 10, 1962,
1469-1473

TEXT: The copolymerization of polyethylene terephthalates (I) ("Lavaan",
Mostaphan, Cronar) with monomers and monomer mixtures was studied in an
attempt to increase the adhesiveness between (I) and the photographic
emulsion layer containing gelatin. After a heat treatment of no more
than 10 min at 90 - 120°C, the samples were kept immersed in the
monomer or monomer mixture for 7 - 64.5 hrs at 40 - 80°C. 2-methyl-5-
vinyl pyridine, vinyl pyrrolidone, and methyl methacrylate (II) were used
singly or in mixtures with acrylonitrile, methacrylic acid (III), epoxy
resin, styrene, carbinol cement, and gelatin dissolved in acrylic acid
(IV). After treatment with solvents such as benzene or water, and
dissociation, the adhesiveness was examined by way of the 5-ball system.
*Card 1/2

Synthesis of graft copolymers

5/190/62/004/010/003/010
B144/B186

The tensile strength of 8 · 10 mm specimens was tested with a Schopper dynamometer at an elongation rate of 10 cm/min. Laysan, Hostaphan, and Cronar behaved similarly. The best adhesiveness was reached by copolymerizing (I) with (II-III) mixtures independently of their mixing ratio, and with (IV) in thin monomer layers (2 - 5% by weight). The viscosity could not be tested, as (I) after grafting, was no longer soluble in xylene. Grafting reduced the elongation at rupture, whilst slightly increasing the tensile strength, but did not affect the optical properties and orientation. There are 1 figure and 4 tables.

ASSOCIATION: Institut elementoorganicheskikh soedineniy AN SSSR
(Institute of Elemental Organic Compounds AS USSR).

SUBMITTED: May 20, 1961

Card 2/2

ZASEDA, Igor'[Zasieda, Ihor], master sporta

White heart of the Pamir. Znan. ta pratsia no.2:21-22 F '63.
(MIRA 16:4)

(Pamirs--Mountaineering)

ZASEDATELEV, A.M., kand.tekhn.nauk; RUKHADZE, V.A., inzh.

Relationship between the rigidity of bellow-type transmitters
and the static pressure. Nauch.dokl.vys.shkol'y; mash.i prib.
no.1:228-235 ' 58. (MIRA 12:1)

1. Predstavleno kafedroy "Pribory tochnoy mekhaniki" Moskovsko-
go vysshego tekhnicheskogo uchilishcha imeni N.E. Baumana.
(Measuring instruments)

RYABINKIN, V.P., inzh.; ZASEDATELEV, G.F., inzh.

Mechanizing processes of welding sections of the super-
structure on diesel-powered loose-cargo ships. Sudostroenie
25 no.9:47-54 8 '59. (MIRA 12:12)
(Ships--Welding)

ZASNDATELEV, I., polkovnik

Zeroing in mortars with the aid of a range finder and
a stop watch. Voen. vest. 39 no.6:66-70. Je. '59.

(MIRA 12:9)

(Mortars (Ordnance)) (Range finding)

ZASEDATELEV, I., gvardii polkovnik; KONOVALOV, N., polkovnik.

Mortar marksmanship training. Voen.vest. 36 no.4:26-31 Ap 56
(MLBA 9:8)

(Mortars (Ordnance))

ZASEDATELEV, I., gvardii polkovnik.

Position area survey of a mortar battery on the basis of its
fire. Voen.vest. 36 no.8:61-65 Ag '56. (MLBA 9:10)

(Artillery drill and tactics)

ZASHEDELEV, I., gvardii polkovnik.

Review and analysis of firing the 82-mm mortar. Voen.vest. 35 no.5:
71-73 My '55. (MIRA 9:7)
(Mortars (Ordnance)) (Russia--Army--Artillery)

GOR'YAINOV, K.E., doktor tekhn.nauk; ZASEDATELEV, I.B., kand.tekhn.nauk

Vacuum cooling of large gas-concrete wall blocks. Biul.tekh.inform.
4 no.11:21-22 N '58. (MIRA. 11:12)

(Autoclaves) (Concrete blocks)

GORIYAZHOV K.E., doktor tekhn.nauk; ZASEDATEL'NY, I.B., kand.tekhn.nauk

Thermophysical processes during the autoclave hardening of large porous
concrete products. Bet. 1 shel.-bet. no.2:62-67 F '59.

(MIRA 12:3)

(Lightweight concrete) (Autoclaving)

PANIN, A.S., kand.tekhn.nauk; ZASEDATELEV, I.B., kand.tekhn.nauk

Manufacturing ash gravel. Stroi.mat. 8 no.1:14-17 Ja '62.

(MIRA 15:5)

(Gravel)

ZHUKOV, Dmitriy Vasil'yevich, kand. tekhn. nauk; ZASEDATELEV, Igor'
~~Borisovich, kand. tekhn. nauk; PALEVSKIY, S.A., nauchnyy red.;~~
SHIROKOVA, G.M., red. izd-va; NAUMOVA, G.D., tekhn. red.

[Heating and drying of buildings and industrial structures
erected in the winter] Obogrev i sushka zdaniy i promyshlen-
nykh sooruzheniy, vozvodimykh v zimnikh usloviyakh. Moskva,
Gosstroizdat, 1962. 154 p. (MIRA 15:8)
(Heating) (Drying apparatus)

ZHUKOV, D.V., kand.tekhn.nauk; ZASEDATELEV, I.B.

Electric heating of reinforced concrete floors in building under winter
conditions. Prom.stroi. 37 no.8:47-49 Ag '59. (MIRA 12:11)
(Electric heating) (Flues)

SOV/19-58-6-633/685

AUTHORS: Goryaynov, K.E., Zasedatelev, I.B., Avrutin, M.L.,
Volchek, I.Z., and Lizogub, A.L.

TITLE: A Method of Producing Concrete, Silicate and Other
Products (Sposob izgotovleniya betonnykh, silikat-
nykh i drugikh izdeliy)

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 140 (USSR)

ABSTRACT: Class 80a, 9¹⁰. Nr 113746 (587315 of 2 Dec 1957).
Submitted to the Committee for Inventions and Dis-
coveries at the Ministers Council of USSR. Produc-
ing concrete, silicate and similar products in
autoclaves by steaming under pressure, and prevent-
ing detrimental temperature stresses from appearing
in the products as well as speeding up the work
process by producing a vacuum in the autoclave
after the process.

Card 1/1

GORBYAYNOV, K.E., doktor tekhn. nauk; ZASEDATELEV, I.B., kand.tekhn.nauk

Using vacuum techniques for cooling large porous products in
autoclaves. Stroi. mat. 6 no.6:18-20 Je '60. (MIRA 13:6)
(Autoclaves) (Lightweight concrete)

ZASEDATELEV, I.B.

GORAYAYNOV, K.E., doktor tekhn.nauk; VOLCHER, I.Z., kand.tekhn.nauk;
ZASEDATELEV, I.B., inzh.

Using lightweight cinder concrete in making large wall blocks. Et.
1 zhel.-bet. no.6:229 Ja '58. (MIRA 11:6)
(Cinder blocks)

ZASEDATELEV, I.B.

GOREYAYNOV, K.H., doktor tekhn. nauk; YEFIMOV, A.D.; VOLCHEK, I.Z., kand.
tekhn. nauk; AVEUTIN, M.L., inzh.; LIZOGUB, A.A., inzh.;
ZASEDATELEV, I.B., inzh.

Large wall blocks made of autoclave hardened lightweight concrete.
Bul. tekhn. inform. 4 no.2:1-5 P '58. (MIRA 11:3)

1. Chlen-korrespondent Akademii stroitel'stva arkhitektury (for
Yefimov).

(Concrete blocks) (Lightweight concrete)

ZASKDATELEV, I.B., inzhener.

Evaluation of heat processes in the accelerated hardening of
concrete. Biul.tekh.inform. 3 no.6:17-20 Je '57. (MIRA 10:10)
(Concrete)

~~ZASEDATSEV, I.B.~~

ZHUKOV, D.V., kand.tekhn.nauk; ZASEDATSEV, I.B., inzhener.

Shortcomings in the operation of steam chambers and methods of
eliminating them. Stroi.prom. 35 no.7:7-9 J1 57. (MIRA 10:10)
(Autoclaves)

^S
ZAKHEDATELEV, I.B., Cand Tech Sci—(diss) "Study of thermo-physical
processes ^{as during the} hardening of concrete in ~~the~~ periodic motion chambers."
Mos, 1958. 15 pp (Mos Inst of Engineers of Mining Construction of
^(Moscow City Executive Committee)
the ~~Moscow~~ ^{Moscow} ~~police~~, (KL, 25-58, 113)

-92-

GORIAYNOV, K.E., doktor tekhn.nauk; YEFIMOV, A.D.; VOLCHEK, I.Z.; AVRUTIN, M.I.; ZASEDATELEV, I.B.; NECHAYEV, G.A., red.izd-va; PUL'KINA, Ye.A., tekhn.rsd.

[Large aerated-cement wall blocks; practices of the Main Administration for Housing and Public Construction in the city of Leningrad] Krupnye gazobetonnye stenovye bloki; iz opyta Glavleningradstroia. Pod red. K.E.Goriainova. Leningrad, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1959. 102 p. (MIRA 13:1)
(Leningrad--Building blocks) (Lightweight concrete)

AVETIKOV, V.G., kand.tekhn.nauk; ZIN'KO, E.I., kand.tekhn.nauk; ZASEDATELEVA,
~~MAKAR~~ inzh.; LESNIKOVA, L.A., inzh.

Steatite with an expanded temperature range of vitrification. Trudy
GIEKI no.4:34-46 '60. (MIRA 15:1)
(Ceramics) (Electric insulators and insulation)

MASHDATELEV, S. M. (NIITeplopribor, Moscow)

"Investigation and Construction of a New Type of Apparatus with a Force Compensation by Pressurized Air."

Report presented at the Scientific Seminar on Pneumo-Hydraulic Automation, 28-29 May 1957, at the Inst. for Automation and Remote Control (Iat), Acad. Sci. USSR

Avtomatika i Telemekhanika, 1957, vol. 18, No. 12, pp. 1148-1150, (author SEMIKOVA, A. I.)

ZASEDATELEV, S.M., inzhener.

Coiling of springs retaining stresses between the coils. [Trudy] MVTU no.
16:90-95 '52. (MLRA 6:6)
(Springs (Mechanism))

ZASHEDELEV, S.M., inzhener.

Graphic method in the solution of some problems in elastic-plastic bending of bars in large-scale transposition. [Trudy] VVTU no.26:173-184 (MLBA 7:5)

'53.

(Flexure--Graphic methods) (Elastic rods and wires)

ZASR: TELEV, S. M.

ZASR: TELEV, S. M. "Spiral Springs with Initial Tension and Their Design." Min of
Higher Education USSR, Moscow Order of Labor Red Banner Higher Technical School ineri
Bauman, Moscow, 1955 (Dissertations For Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

ZASEDATELEV, S.M.

ANDEEYEV, L.Ye., kandidat tekhnicheskikh nauk; BIDEZMAN, V.L., kandidat tekhnicheskikh nauk; BOYARSHINOV, S.V., kandidat tekhnicheskikh nauk; VOL'MIR, A.S., doktor tekhnicheskikh nauk; DIMENTSEIG, Y.M., kandidat tekhnicheskikh nauk; ZASEDATELEV, S.M., inzhener; KINASOSHVILI, R.S., doktor tekhnicheskikh nauk, professor; KOVALENKO, A.D.,; MARUSHIN, V.M., kandidat tekhnicheskikh nauk; MALININ, N.N., kandidat tekhnicheskikh nauk; PONOMAREV, S.D., doktor tekhnicheskikh nauk; PRIGOROVSKIY, N.I., doktor tekhnicheskikh nauk; TETEL'BAUM, I.M., kandidat tekhnicheskikh nauk; UMANSKIY, A.A., doktor tekhnicheskikh nauk, professor; FEDOS'YEV, V.I., doktor tekhnicheskikh nauk; SERENSEN, S.V., redaktor; TRAPEZIN, I.I., kandidat tekhnicheskikh nauk, redaktor; KARGANOV, V.G., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskij redaktor.

[Mechanical engineer's manual; in 6 volumes] Spravochnik mashinostroitel'ia; v shesti tomakh. Izd.2-o, ispr. i'dop. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, Vol.3, 1955. 563 p. (Mechanical engineering) (MLRA 8:12)

ZASDATHLEV, S.M.

Coiling springs with initial stresses. [Trudy] MVTU no.31:109-119
'55. (MIRA 8:5)
(Springs (Mechanism))

ZASADA TELEV, S.M.

Loss of resilience in tension coil springs. [Trudy] MTVU no.31:120-
125 '55. (MIRA 8:5)
(Springs (Mechanism))

MASEDATELEV, S.M., inzhener.

Helical springs with initial tension and their calculation. [Trudy]
MVTU no.46:71-86 '55. (MIRA 9:4)
(Springs (Mechanism))

RABINOVICH, Lev Vladimirovich; ZASEDATELEV, S.M., red.

[Phase-plane methods in the theory and practice of relay-type servo systems] Metody fazovoi ploskosti v teorii i praktike releinykh slediaschikh sistem. Moskva, Energiia, 1965. 150 p. (Biblioteka po avtomatike, no.143)

(MIRA 18:8)

P. P. Candidate of Technical Sciences, ed.

Теплоэнергетический и химический институты приборостроения и регуляторной техники (Инструменты и регуляторы в Тепло- и Химическом Инженеринге) (Moscow, Mashgiz, 1981). 207 p. Errata slip inserted. 8,500 copies printed.

Ed. of Publishing House: G. A. Dudusova; Tech. Ed.: L. V. Shtetlin; Managing Ed. for Literature on the Design and Operation of Machines, *Uchebnoye posobie*; Vasholz, F. I. Fedosov, Engineer.

PURPOSE: This book is intended for engineers and technicians who construct, maintain, and repair industrial instrumentation and regulators.

COVERAGE: The book deals with new investigations in the field of automatic checking and regulation of heat-power and chemical industrial processes. Advanced, time-movement of two-position

The following problems are discussed:

Control operation; effect of mass action and damping on proportional control; new proportional plus integral and programming electronic regulation of boilers; complete automation of open-hearth furnaces; automation of boilers with variable load capacity; measurement of gas flow rates by means of differential pressure transmitters; measuring flow measurement of dust flow; ultrasonic and magnetic-induction flowmeters; pneumatic compensating differential manometers; aggressive-fluid flowmeters; new magnetic and optical-acoustic gas analyzers; concentrated meters; and chlorine and coolant regulators. The book is the fifth in a series containing reports on the investigations carried out by the Section on Heat-Engineering Control Instrumentation and Automation of the Leningradskoye otdelnyye Nauchno-Tekhnicheskogo obshchestva priobrazovaniy promyshlennosti-Mashinno-Tekhnicheskogo obshchestva priobrazovaniy promyshlennosti-Mashinno-Tekhnicheskogo obshchestva priobrazovaniy promyshlennosti-Mashinno-Tekhnicheskogo obshchestva priobrazovaniy promyshlennosti-Machino-Building Industry.) All the articles presented in this book were discussed either at sessions of the above section or at the conference measurements of mechanical quantities called by the section, the VNIIM (Vsesoyuznyy nauchno-Issledovatel'skiy institut metrologii) of D.I. Mendeleeva -- All-Union Scientific Research Institute of Metrology named D.I. Mendeleev), and the Leningradskiy dom nauchnykh imeni A. M. Gor'kogo (Leningrad House for Scientists named after A.M. Gor'ky). No personalities are mentioned. There are 65 references: 41 Soviet, 20 English, and 4 German. References accompany most chapters.

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4. Increasing the number of inflow stages (three-position control)
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SOV/S319

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PART III. MEASUREMENT OF THE CONCENTRATION OF

INDIVIDUAL COMPONENTS IN GASES AND LIQUIDS

ZASHEDELEV, S.M. (Moskva); RUKHADZE, V.A. (Moskva)

Design of force-balanced transmitters. Avtom. i telemekh. 21
no.6:918-928 Ja '60. (MIRA 13:7)
(Transducers)

ZASEDATELEV, S. M.

PHASE I BOOK EXPIRATION 30/7/2003

Moscow. Vysshaye tekhnicheskoye uchilishche
Mashtyabnyy i mekhanicheskyy tochnyy priborov; *Stroenie i
(Design of Parts and Mechanisms of Precision Instruments;
Collection of Articles)* Moscow, Mashgiz, 1960. 260 p.
5,000 copies printed.

Ka. (Title page): T. A. Gavondyan, Doctor of Technical Sciences,
Moscow; K. (Title page): Ya. G. Alaverdyan, Engineer,
Moscow; K. (Title page): A. P. Davyan; Managing Ed. for Literature on
Machine Building and Instrument Making (Mashgiz): K. V.
Ponomarev, Engineer.

PURPOSE: This collection of articles is intended for scientific
workers and engineers engaged in instrument making.

OVERVIEW: The results of investigations on making instruments
with examples and design-verified parts, parts, and mechanisms,
it is also a collection of articles published here for the first time. The
articles cover theory and methods of spherical coordinate systems with
engagement, a new method of manufacturing toothed wheels with
alternating ratio within one revolution, a universal method for
designing an oscillation system for stability by means of com-
plex variables, and precision methods for designing brake
centrifugal governor used in instrument design. Some of the
articles are accompanied by Soviet and non-Soviet references.
No personalities are mentioned.

ZASEDATELEV, S. M. Candidate of Technical Sciences, Doctor.
The effect of the pressure of the surrounding medium on the
accuracy of instruments (and their causes) depending on
the errors in measuring (and their causes) depending on
static pressure in instruments having a bellows as a ver-
sion of the measuring element and the determination of that version
static pressure and the determination of that version of the
static pressure; possible ways of controlling said static
pressure to reduce the effect of the changing pressure of the
surrounding medium are recommended.

Starkov, I. S. Candidate of Technical Sciences, Doctor.
Determining the Inertia Moment of a Mass and the Spring Load
for an Electromagnetic Relay for determining the spring load
A graphoanalytical method for determining the spring response
and the inertia moment of the anchor for the given response
time of an electromagnetic relay is presented.

Metelkov, N. P. Engineer. Methods for Designing a Focal-
Plane Shutter. The duration of exposure of the focal-plane shutter with in-
termediate movement of blinds is determined; also inertia
depend on the changes of the exposure time needed for the
shutter to pass across the lens, and of the basic parameters
of driving springs for a given exposure. The exact method
of the shutter design is presented.

2 ASE DATA L E U S M

28(1) **PHASE I BOOK** **SOV/2702**
Academy nauk SSSR. Institut avtomatiki i telemekhaniki. 1st, Moscow, 1957
Seminar po pnevmogidravlicheskoy avtomatike. 1st, Moscow, 1957
Statey, ustroystva i elementy pnevmov- i gidromekhaniki. (Gornik)
(Pneumatic and Hydraulic Circuits, Units, and Elements in
Automation. Collection of Papers.) Moscow, Izd-vo AN SSSR,
 1959. 233 p. Errata slip inserted. 2,700 copies printed.
Repr. Ed.: M. A. Ayterman, Doctor of Technical Sciences, Professor
Ed. of Publishing House: A. A. Tal. 1. Tech. Ed.: I. P. Polyakov.
PURPOSE: This collection of papers is intended for scientific
 research workers and engineers in the field of design and con-
 struction of pneumatic and hydraulic equipment and accessories
 for automation.
COVERAGE: This collection contains papers read at the Seminar on
 Pneumatic and Hydraulic Devices for Automation, May 28, 1957.
 The collection is divided into the following three groups: 1)
 newly developed pneumatic and hydraulic circuits; 2) pneumatic
 and hydraulic devices, including regulating units, transmitters
 and transducers, actuating mechanisms, special-purpose devices,
 and auxiliary equipment; and 3) elements of pneumatic and hyd-
 raulic devices for automation, such as controlled and permanent
 nozzles and diaphragms. No personalities are mentioned. Refer-
 ences follow several of the papers.
Podgornitskiy, N. L., and E. M. Braverman. Moscow. 1957. Three-
Component Regulating Unit. 30
Podgornitskiy, N. L., and E. M. Braverman. Moscow. 1957.
Small-size Hydraulic Regulating Unit. 37
Podgornitskiy, N. L., and V. A. Bukhadze. Moscow. 1957. Problems in
Constructing Primary Instruments -- Differential Pressure Trans- 61
mitters. This paper is a theoretical discussion of differential
 pressure transmitters dealing with their sensitivity, errors, and
 reliability.
Krasnitskiy, Yu. V. Moscow. 1957. Electropneumatic Transducers. 1st 77
ed. AN SSSR
Podgornitskiy, N. L., and V. A. Bukhadze. Moscow. 1957. Static Characteristics of a Pneumatic 86
Relay With Constant Pressure Drop in Nozzles.
 This paper discusses the static characteristics of a back-
 pressure pneumatic relay with indicators that are not
 sensitive to minute gap changes.
Zasodtselev, S. M., and V. A. Bukhadze. Moscow. 1957. Differential 91
Pressure Transmitters With Pneumatic Force Compensation (Review
of Non-Soviet Designs).
Tamir, Y. P. Moscow. 1957. General-purpose Hydraulic Power 99
Servodrive
Arkhangelskiy, A. F. Hydraulic Universal Variable-speed 103
Transmission (URS)
 This paper describes an axial-piston variable-speed
 transmission. Its technical specifications and fields
 of application are discussed.
Belushkin, S. A. Geningrad. 1957. Equations for a Stabilizing System 112
With a Hydraulic Actuator Connected With a Control Device by
 Hydraulic Main Lines
 Equations of the motion of the actuator piston and elements
 of the control device are given. Design examples are
 presented.

SOV/124-58-10-11826

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 151 (USSR)

AUTHOR: Zasedatelev, S.M.

TITLE: Computation of Extension Springs Wound With an Initial Tension
(Compression of Loops) [Raschet pruzhin rastyazheniya, navitykh
s nachal'nym natyazheniyem (mezhvitkovym davleniyem)]

PERIODICAL: V sb.: Vopr. proyektir., izgotovleniya i sluzhby pruzhin.
Moscow--Leningrad, Mashgiz, 1956, pp 59-85

ABSTRACT: Various possibilities of application of springs with compressed loops in machines and instruments are examined. Critique of the existing arbitrary recommendations on prestressing of springs is given, and a method, derived by the author, permitting selection of the degree of prestressing in accordance with conditions of stability, is presented. Deformations which occur in the wire during winding operations and which ensure a residual torque are analyzed by considering the successive stages in the manufacture of springs. The magnitude of the initial tensile stress is computed on the basis of the mechanical properties of the material in accordance with the theory on small elastic-plastic deformations

Card 1/2

SOV/124-58-10-11826

Computation of Extension Springs Wound With an Initial Tension

as applied to bending and twisting of a round rod. The computation of the design strength of the springs is based upon torsional stresses and the corresponding yield point. Investigations were also performed in order to determine how the initial nonlinear portion of the stress-strain curve of a spring is affected by such factors as deformation of end loops, variation in loop-compression stresses between individual loops, and deviation of the line of action of the load from the geometrical axis of the spring.

V. A. Bykov

Card 2/2

ZASEDATELEV, V.N., inzhener.

Industrializing and mechanizing gas line construction. Gor.khoz.
Mosk. 24 no.2:1-8 F '50. (MLRA 7:11)
(Moscow--Gas pipes) (Gas pipes--Moscow)

ZASEDATELEVA, G.S., kand.veterinarnykh nauk

Methods of selecting brucellar animals before they are vaccinated
in fresh infection foci and the epizootiological importance of cows
which react long after the vaccination. Trudy VIEV 26:98-101 '62.
(MIRA 16:2)

1. Laboratoriya po izucheniyu brutselleza Vsesoyuznogo instituta
eksperimental'noy veterinarii.
(Brucellosis in cattle)

MORYAKOVA, O.I., kand.veterinarnykh nauk; ZASEDATELEVA, G.S., kand.
veterinarnykh nauk

Study of immunobiological reactions in cattle vaccinated with
strain no.19 under different epizootiological conditions. Trudy
VIEV 26:90-97 '62. (MIRA 16:2)

1. laboratoriya po izucheniyu brutselleza. Vsesoyuznogo instituta
eksperimental'noy veterinarii.
(Brucellosis in cattle) (Immunology)

ACC NR: AP6030796 (A,N) SOURCE CODE: UR/0346/66/000/009/0015/0018 6

AUTHOR: Vershilova, P. A.; Ivanov, M. M.; Orlov, Ye. S.; Kaymazova, Ye. I.;
Kurdina, D. S.; Zagdataleva, G. S.; Mikhaylov, N. A.; Pinigin, A. P.; Merinov,
S. P.; Dranovskaya, Ye. A.; Davydov, N. N.

ORG: none

TITLE: Brucellosis cultures isolated from deer in the northern Soviet Union

SOURCE: Veterinariya, no. 9, 1966, 15-18

TOPIC TAGS: brucellosis, brucella culture, disease vector, deer, animal disease

ABSTRACT: Brucellosis is widely distributed among deer in the northern part of the Soviet Union. In general they serve as carriers and epizootic reservoirs of brucellosis in cattle and sheep. The most typical species is *Brucella abortus*, with the other two common types rare or absent. A fourth type, *Br. rangifer*, differing from the others, was also isolated.

[WA-50; CBR No. 12]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 014/ OTH REF: 010

Card 1/1

UDC: 619:616.981.42-02:636.294

15

ca

Treating coal and cellulose with ammonia under pressure and heating. S. S. Dragunov and A. N. Zaslavskaya. Trans. Sci. Inst. Fertilizers (Leningrad) No. 127, 53-51 (1961). Brown coal, peat and cellulose treated with liquid and gaseous ammonia and $(\text{NH}_4)_2\text{CO}_3$ in an autoclave at various pressures, temps. and time intervals proved the following: the brown coal without extra pressure combines with NH_3 in quantities slightly higher than the no. of carboxyl groups in it. At higher pressures the quantity of NH_3 equal to the phenol hydroxyl and carboxyl groups. Coal of amorphous origin combines with very little NH_3 . Cellulose takes up more NH_3 at higher temp. and in the presence of O_2 . As much as 30% N could be combined with the cellulose. If ammoniated cellulose is acidified with Cl or HNO_3 the product becomes easily sol.

J. S. Joffe

ASB.5LA METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMPLIX

INTROD. MET. OWN. CSE

REVISIONS

811181 CSE OWN. 151

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963910006-6

8/196/63/000/003/005/012
A052/A126

...teknika i energetika...

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963910006-6"

S/196/63/000/003/005/012

AC52/A126

... with a widened baked interval

... to use as a flux feldspars (3 - 5% and pegmatites ...
... of the fluid in baking and to widen this way the bak-
... by

... different mineralogical ... increased the vitreous-phase content

Strength on 100 mesh sieve

Card 2/4

baking interval to just 20 min. The addition of 12% and in particular of chalk (4 - 6%) has a positive effect on properties of steatite. A combined addition of magnesite and chalk gave no positive results. The widest baking interval (40 hr.) maximum density and $\sigma_c = 1.550 \text{ kg/cm}^2$ had steatite with 4% bulgared chalk and 5% magnesite. Its vitreous-phase content to 30%.

100 mesh sieve (100 microns) on the sieve no. 000 up to 100%.

"APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963910006-6

34 1 1 1

APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963910006-6"

AUTHORS: Ave'nikov, V. G., Zin'ko, E. I., S/072/60/000/03/007/023
Zasodateleva, N. A. B003/B008

TITLE: High-frequency Ceramics on Wollastonite Basis

PERIODICAL: Steklo i keramika, 1960, Nr 3, pp 25-29 (USSR)

ABSTRACT: Wollastonite has lately been used increasingly for electro-ceramics owing to its favorable electric properties. In the Soviet Union there are larger wollastonite deposits in the following regions: in the region north of the Balkhash Lake, in the "Western Dzhangalyk" Mines in Northern Tadzhikistan, where wollastonite accumulates as barren rock and goes into backfilling, in the Aldan region of the Yakutskaya ASSR; according to information from the Institut geologii AN Uzbekskoy SSR (Institute of Geology of the AS of the Uzbekskaya SSR) in the Nakpay deposit, but also in other deposits of Uzbekistan: Lyangar, Koytash, Ingichka, Chatkal'skiy Range. Wollastonite from Dzhangalyk was investigated. The most important impurities are epidote, diopside and sphene. The material was cleaned twice (Table 2) with the separator 138-SE at the laboratoriya elektricheskikh i magnitnykh metodov obogashcheniya, Institut gornogo dela AN SSSR (Laboratory for Electric and Magnetic Dressing Methods of the Institute of Mining AS USSR); analyses are given in table 3. A ceramic mass

Card 1/2

High-frequency Ceramics on Wollastonite Basis

S/072/60/000/03/007/023
BC03/B008

was produced with an addition of 10% barium carbonate and 20% clay from Chasov Yar; the electric properties were investigated (Fig 1). Since wollastonite changes practically irreversibly into pseudowollastonite, at about 1250° with a change in structure, it was the main thing to lower the firing temperature. Four masses were produced: VD-6 with 5% lead boron glass, VD-7 with 5% ascharite, VD-8 with 10% quartz sand and VD-9 with 3% boracite glass. The investigation with the petrographic microscope was carried out by E. I. Medvedovskaya (Figs 2-4). The firing temperatures are 1120, 1210, 1290, and 1300°. For wollastonite from Dzhangalyk the change into pseudowollastonite occurs at 1290°. There are 4 figures and 5 tables.

Card 2/2

ZASEL, Jan

On the program of schooling drivers. Motor 11 no.42:11 21 0 '62.

ZASEL'SKIY, D. A. and LISHNEVSKAYA, L. A.

Interaction of Diazo-Compounds with Sulfamic Acid and its Derivatives. II. Study of the Properties of Aryl-1-Methyl-3-Triazene Sulfo Acids-3, page 446, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol I, Moscow-Leningrad, 1953, pages 762-766.

ZASL'ISKIY, D. Z. and LISHNEVSKAYA, L. A.

Interaction of Diazo-Compounds with Sulfamic Acid and its Derivatives. I. Interaction of Diazo-Compounds with N-Methyl Sulfamic Acid, page 434, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol I, Moscow-Leningrad, 1953, pages 762-766.

S/032/60/026/008/043/046/XX
B020/B052

AUTHORS: Marayev, S. Ye. and Zaselyan, B. N.

TITLE: News in Brief

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 8, p. 1029

TEXT: The authors report on a new method of producing boats of pure alumina for the zone melting of aluminum. A mixture of alumina (90-95%) and aluminum powder (5-10%) for radio valves is carefully mixed, an aqueous solution of starch and molasses (2:1) is added and carefully mixed again. Sample rods are then pressed from this mixture. They are sintered for 5-6 hours at 1200°, and cooled down together with the furnace. Holes are then drilled into the rods by a milling machine with welded alloy cogs. The boats are sufficiently strong and endure a considerable number of melts without polluting the aluminum. ✓

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy alyuminiyevo-magniye-
vyy institut (All-Union Scientific Research Institute of
Aluminum and Magnesium)

Card 1/1

1. 29157-46 ENP(k)/ENT(m)/I/ENA(d)/ENP(v)/ENP(t)/ETI IJP(s) JD/HM
ACC NR: AP6018662 SOURCE CODE: UR/0125/66/000/003/0077/0077

62
B
A

AUTHOR: Ushakova, S. Ye.; Zaslavyan, B. N.; Kokoreva, I. I.

ORG: none

TITLE: Microscopic investigation of joints made by diffusion welding in a vacuum

SOURCE: Avtomaticheskaya svarka, no. 3, 1966, 77

TOPIC TAGS: diffusion welding, vacuum welding, copper, steel, electron microscope, welding technology/M2T copper, 30 KhGSA steel, JEM-5Y electron microscope

ABSTRACT: Vacuum diffusion welding is one of the most promising methods for joining metals. M2T copper, M2T copper with 30KhGSA steel and 30KhGSA steel alone were compared to study methods for investigation of the diffusion layer.

The experimental SDVU-6 installation was used for welding. The weld zone of the specimens was first studied on an MIN-8M metallographic microscope (1000X). A JEM-5Y electron microscope was used for a more detailed study.

The electron microscope images with a resolution of 0.1 μ for study of the structure of metals and alloys with a magnification of 10,000X. The electron microscope film replicas were used in the electron microscope studies. The quality of a joint made in a vacuum is difficult to determine at small magnifications. For instance, incomplete welding is barely distinguishable at 150-200X, but become clearly visible at 600-800X. It is impossible to find the joint in copper specimens at low magnification, the boundary appears only at

Card 1/2

UDC: 621.721.89:533.5

I 29157-66

ACC NR: AF6018662

600-900X. The diffusion layer is very similar in structure to the grain boundaries in copper. Thus, low magnifications (150-300X) when studying specimens made up of homogeneous materials may result in erroneous conclusions on the quality of the weld. The boundary in specimens welded from two dissimilar materials (30KHGSA steel and M2T copper) is clearly visible to the unaided eye. dark strip with bulges is visible at low magnifications (150-300X) giving the impression of incomplete welding. Higher magnification reveals that this is a transition layer. The diffusion layer has a structure which differs sharply from that of steel and is similar to the structure of copper although somewhat thinner. In two copper specimens, the diffusion layer for the most part is a continuation of the copper grains in one specimen. The diffusion layer is sometimes extremely small, but in most cases it is of considerable size. The diffusion layer of a copper-copper joint is 3 or 4 times as broad as the copper-steel layer, but has a structure similar to that of copper. Extremely high magnifications (50,000X) cannot be used for judging welding results. In this case the transition from the diffusion layer to the base metal is insufficiently sharp. Magnifications from 600-900 to 10,000-15,000 are optimum for determining the quality of vacuum diffusion welding. Orig. art. has: 2 figures. [JPMS]

SUB CODE: 13, 11 / SUBM DATE: none

Card 2/2 A(2)

SIN'KOV, V.M., kand. tekhn. nauk; ZASENKO, V.L., inzh.; KOVALENKO, V.P.,
inzh., POL'KMAN, K.Yu., inzh.

Computer for calculating the distribution of active loads with
a given fuel consumption. Elektrichestvo no.8:9-15 Ag '60.
(MIRA 13:8)

1. Institut avtomatiki Gosplana USSR.

(Electronic analog computers)
(Electric power distribution)
(Electric power plants)

SIN'KOV, V.M., kand.tekhn.nauk; ZAKIDAL'SKIY, A.I., inzh.; ZASENKO, V.I.,
inzh.; SITNIKOVA, I.A., inzh.; FOL'KMAN, K.Yu., inzh.; KHOLMSKIY,
D.V., inzh.

Computers for calculating the most favorable distribution of active
loads in composite electric power systems. Avtom.i prib. no.2:
126-138 '61. (MIRA 14:12)
(Electronic analog computers) (Electric power distribution)

D'YAKOV, A.M., inzh.-mekhanik; LEKHKOYNE, M.M.; BRIL'CHUK, P.L., kand.tekhn.
nauk, red.; ZASENTSEV, I.I., inzh., red.

[Technological process of the overhauling of the GAZ-51,
GAZ-63-63A, GAZ-93, PAZ-651-652 motor vehicles] Tekhno-
logicheskii protsess kapital'nogo remonta avtomobilei
GAZ-51, GAZ-63-63A, GAZ-93, PAZ-651-652; metodicheskoe
posobie. Dushanbe, Tadzhikskii sel'khoz. in-t, 1963. 126 p.
(MIRA 17:9)

ZAWADZKI, Zbigniew A.; TOPOJSKA, Paula; ZASEPA, Ryszard

Hemoglobin, hematocrit & erythrocyte count in blood donors. Polski tygod. lek. 13 no.50:2010-2016 15 Dec 58.

1. Z Kliniki Hematologicznej; kier. prof. dr med. W. Laskowicz. Instytut Hematologii; dyr. doc. dr med. A. Trojanowski oraz ze wszystkich wojewodzkich stacji krwiodawstwa. Adres: Warszawa 10, Krucza 51 m. 7.

(BLOOD TRANSFUSION

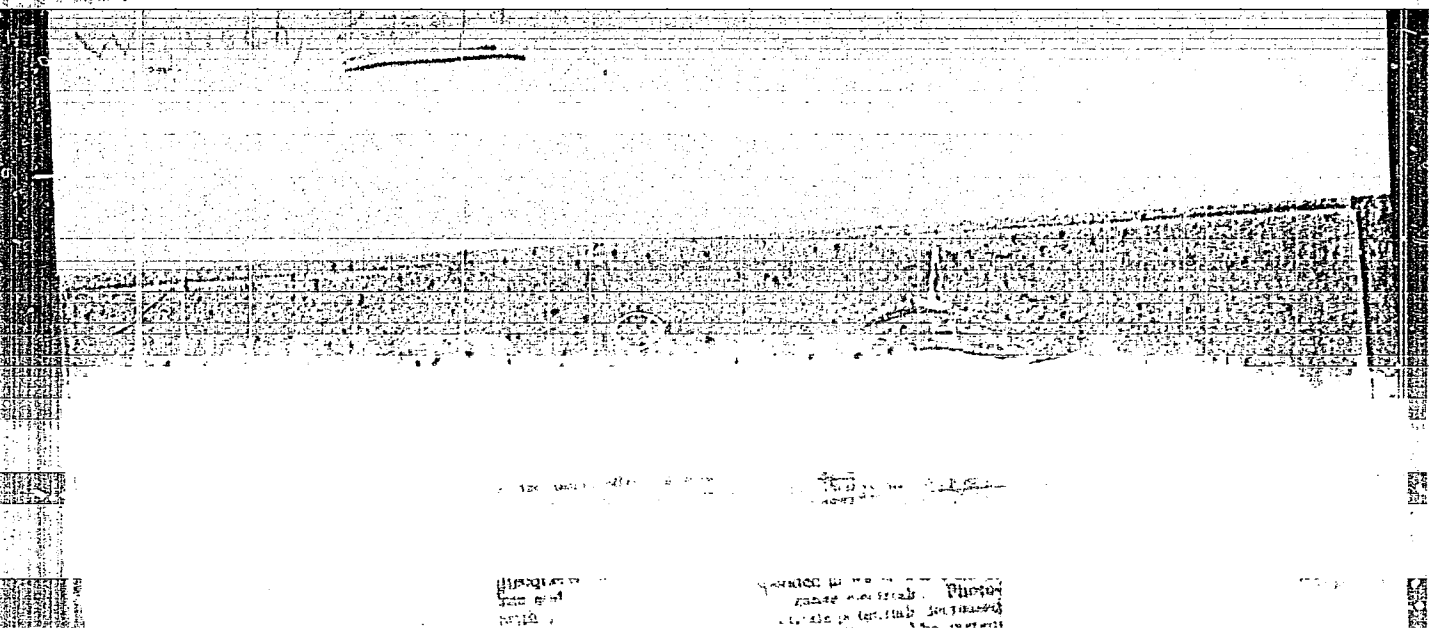
erythrocyte count, hematocrit & hemoglobin values in donors (Pol))

(ERYTHROCYTES

count, hematocrit & hemoglobin values in blood donors (Pol))

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APPROVED FOR RELEASE: 03/15/2001

CIA-RDP86-00513R001963910006-6"

ZASEPA, Wojciech

Preparation and characteristic of silver hydrosol. *Mat chemia*
4:55-64 '61.

1. Katedra Chemii Fizycznej, Poznan.

ZASEPA, Wojciech

Photovoltaic properties of silver hydrosol. Mat. chemia 4:65-72 '61.

1. Katedra Chemii Fizycznej, Poznan,

ZASEPA, W.

Mistr: 4E2c(j)

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74
1/1

~~Bequerel effect in some xanthene dyes and in aqueous solutions of their copper salts. Stefan Paszyc and Wojciech Zasepa (Univ. Poznan, Poland). Prace Komisji Mat. Fiz. Nauk. Wydział Mat. Przyrod., Prace Komisji Mat. Przyrod. 7, No. 8, 13-26 (1958) (English summary).—~~
~~Bequerel effect of eosin, erythrosin, Bengal rose, and uranin and of their Cu⁺⁺ salts suspended in water was examined with a Pt smooth electrode or Cu gauze electrode. Photo-sensitivity of salts was slight. Electrode potentials decreased with time in dark and a little faster in light. The system Cu⁺⁺/aq dye salt showed positive photo-sensitivity. Electrode potential was increased by irradiation and dropped rapidly after interruption of irradiation. J. Stecki.~~

2-9

ZASEPA, Wojciech

Method of obtaining and characteristics of silver hydrosol. Mat
chemia 4:55-64 '61.

1. Uniwersytet im. Adama Mickiewicza w Poznaniu, Katedra Chemii
Fizycznej.

ZASEPA, Wojciech

Photovoltaic properties of silver hydrosol. Mat chemia 4:65-72 '61.

1. Uniwersytet im. Adama Mickiewicza w Poznaniu, Katedra Chemii Fizycznej.

ZASETSKAYA, G.I., mladshiy nauchnyy sotrudnik

Use of new trimming materials in the manufacture of fur hats.

Kozh.-obuv.prom. 4 no.11:12-13 N '62.

(MIRA 15:11)

(Hats)

BERG, P.P.; FEYGEVSON, B.Yu.; Prinimali uchastiye: ZASITSKIY, G.F., inzh.;
RAKOGON, V.G., inzh.; KUZNETSOV, Ye.I., inzh.; SZOSYALEVA, A.N.,
starshiy tekhnik; USTICHENKO, R.D., starshiy tekhnik.

Metal shell molds. Lit. proizv. no.10:32-53 O '60. (MIRA 13:10)
(Foundaries--Equipment and supplies)

GUGLIN, N.H.; PROVORNY, A.K.; ZASETSKIY, G.F.; GULYAYEV, B.B.

Manufacture of shaped steel ingots by continuous casting.

Steel 21 no.10:895-899 0 '61.

(MIRA 14:10)

(Continuous casting)

(Steel ingots)

S/133/60/000/011/018/023
A054/A029

AUTHORS: Verbol'skaya, Ye.D., Zaslavskiy, G.F., Isakov, I.V., Engineers,
Khlebnikov, A.Ye., Doctor of Technical Sciences

TITLE: Experience in the Treatment of Molten Steel With Rare-Earth
Metals

PERIODICAL: Stal', 1960, No. 11, pp. 1030-1033

TEXT: In order to obtain more information on the possibilities of improving the plastic properties of chrome-nickel-molybdenum alloys by the addition of rare-earth metals, tests were carried out (with the cooperation of Z.B. Vagonov and V.I. Belyayev) by treating these alloys with a mixed metal containing 40-50% cerium, 15-20% lanthanum, 10-20% other rare-earth metals and 5-10% iron. The test steel was melted in an induction vacuum furnace with a magnesite crucible of 150 kg capacity, the charge consisted of armco steel and synthetic iron, the melting temperature was 1,550-1,580°C; the alloying elements were added without affecting the vacuum after a certain interval for the degasification of the metal. Pouring took place in an argon atmosphere at a pressure of 600-700 mm Hg, the test ingots were 140 x 140 mm and weighed about 70 kg. Investigations to determine the influence of the rare-earth metal additives on the sulfur content and on the quantity of non-
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S/133/60/000/011/018/023
A054/A029

Experience in the Treatment of Molten Steel With Rare-Earth Metals

metallic inclusions revealed that under the effect of rare earth elements the non-metallic phase still forms in the liquid steel before the precrystallization period. The composite inclusions which are formed during this period coagulate easily and float on the surface of the casting. During this floating period these inclusions can be captured in the crust zone of the casting by the growing crystals. The total amount of sulfur in these agglomerations is about 0.18-0.19%, while the liquid steel before treatment with mixed metal contains about 0.024-0.030% S and the finished metal about 0.003-0.016% S. The sulfur residue in the metal decreases in proportion with the increase in the quantity of the mixed metal added, and the longer the metal is kept liquid, the larger is the amount of sulfur inclusions which can be removed from the casting. The quantity of oxide-inclusions also decreases in the rare-earth metal alloyed steels, irrespective of the melting method; only the amount of aluminates increases to some extent. The tests carried out to determine the mechanical properties of the new type steel showed that rare-earth metal alloyed steels of the same composition but cast in open and in vacuum furnaces had practically the same values as regards strength and tenacity, in cast and in

Card 2/3

S/133/60/000/011/018/023
A054/A029

Experience in the Treatment of Molten Steel With Rare-Earth Metals

rolled condition as well; the steel melted in a conventional furnace has a tenacity 1.5-2.0 times higher than the same type of steel deoxidized by 0.07% Al; when melted in a vacuum furnace, the increase in tenacity is 2-2.5 times greater compared with the Al-treated steels; the steel with a C-content of 0.40% shows the same plastic properties in melted and in rolled condition as the chrome-nickel-molybdenum steels containing 0.30%C and produced in open-hearth furnaces according to the direct reduction process. In the rolled steels containing 0.40% C and alloyed with rare-earth metals no anisotropy in the mechanical properties can be observed at tempering, both as regards the sorbite and the martensite structure. The laboratory tests were confirmed by industrial scale tests in the UZTM. The samples taken from various (upper and lower) parts of the sheets rolled from the test ingots (with a C content of 0.41% containing chrome-nickel-molybdenum deoxidized in the ladle by 350 g/t Al and containing 2 kg/t mixed metal) displayed remarkable chemical homogeneity. Practically no segregation of carbon, sulfur and phosphorus could be observed. From the tests it is assumed that rare-earth metal alloyed chrome-nickel-molybdenum steels can be used in machinery constructions for replacing rolled or hammered machinery parts. There are 2 figures, 6 tables and 3 Soviet references.

Card 3/3

18(5)

SOV/128-59-3-12/31

AUTHOR: Smolenskiy, S.I., Guglin, N.N., ~~Vassilakiy, G.P.~~,
Provornyy, A.K. and Tyutev, V.A., Engineers

TITLE: Steel Molds for Large Steel Castings

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 3, pp 23-26 (USSR)

ABSTRACT: Metal dies for casting of large steel cast shapes are made from steel or cast iron. As demonstrated by the experiments the cast iron dies are unserviceable within short periods. Against that steel dies show far better properties. A method has been worked out to pour large shell-type castings of several tons of weight by means of the permanent die method. Special designs had to be built for this method. Pouring of the metal is done in five steps and in accordance with the design of the casting and in accordance with the technology of the die shape. The experimental method showed that within a certain time interval all types of the die designs are distorted and that hair line cracks appear on the wor-

Card 1/3

SOV/128-59-3-12/31

Steel Molds for Large Steel Castings

king surface. Consequently the quality of the experimental dies is judged by way of two characteristics:

- a) According to the number of pourings possible till to the point of repair, when the cracks have to be eliminated;
- b) To the point when the exact dimensions are lost and must be re-machined.

Several tests have been made to study the properties of the metal dies, to establish the suitable shapes and the necessary thickness of the walls. By means of tables, and photographs the results of the tests in connection with the contents of sulphur, of carbon, and in connection with the mean thickness of the walls and the point of formation of hair line cracks are published. Conclusion: Best results will be achieved with metal dies having a wall thickness of 150 to 170 mm. The steel used for the die should not have more than 0,10% carbon and not more than 0,025% of sulphur

Card 2/3

Steel Molds for Large Steel Castings

SOV/128-59-3-12/31

Permanent Metal Dies from Steel for the Casting of Large Steel
Casting Shapes

contents. There are 7 graphs and 2 photographs.

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GUREVICH, S.M.; DIDKOVSKIY, V.P.; NOVIKOV, Yu.K.; FILORIK'YAN, B.K. (Moskva);
ZASETSKIY, G.F. (Moskva); KRAVCHENKO, V.F. (Moskva); NOVIKOVA, A.A. (Moskva)

Properties of commercial titanium and alloys of the OT4-type prepared
by electric slag melting. Avtom. svar. 16 no.4:27-33 Ap '63.
(MIRA 16:4)

1. Institut elektrosvariki im. Ye.O.Patona An UkrSSR (for Gurevich,
Didkovskiy, Novikov).
(Titanium—Electrometallurgy) (Zone melting)

ZASITSKIY, G. F.

VERBOL'NAYA, Ye. D.; ZASITSKIY, G. F.; IBRAKOV, I. V.; KULEBNINOV, A. Ye.

Vliyaniye spetsobov raskisleniya na svoystva khromo-nikel'-molibdenovoy
stali.

report submitted for the 5th Physical Chemical Conference on Steel Production,
Moscow, 30 Jun 1959.

ZASETSKIY, G.F.

115

PHASE I BOOK EXPLOITATION

SOV/5411

Konferentsiya po fiziko-khimicheskim osnovam proizvodstva stali. 5th,
Moscow, 1950.

Fiziko-khimicheskiye osnovy proizvodstva stali; trudy konferentsii
(Physicochemical Bases of Steel Making; Transactions of the
Fifth Conference on the Physicochemical Bases of Steelmaking)
Moscow, Metallurgizdat, 1961. 512 p. Errata slip inserted.
3,700 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni
A. A. Baykova.

Responsible Ed.: A. M. Samarin, Corresponding Member, Academy
of Sciences USSR; Ed. of Publishing House: Ya. D. Rozentsveyg.
Tech. Ed.: V. V. Mikhaylova.

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Physicochemical Bases of (Cont.)

SOV/5411

PURPOSE: This collection of articles is intended for engineers and technicians of metallurgical and machine-building plants, senior students of schools of higher education, staff members of design bureaus and planning institutes, and scientific research workers.

COVERAGE: The collection contains reports presented at the fifth annual convention devoted to the review of the physicochemical bases of the steelmaking process. These reports deal with problems of the mechanism and kinetics of reactions taking place in the molten metal in steelmaking furnaces. The following are also discussed: problems involved in the production of alloyed steel, the structure of the ingot, the mechanism of solidification, and the converter steelmaking process. The articles contain conclusions drawn from the results of experimental studies, and are accompanied by references of which most are Soviet.

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Physicochemical Bases of (Cont.)

SOV/5411

(Zlatoust Metallurgical Plant) A. K. Petrov, Engineer, O. M. Chekhomov, G. A. Khasin, A. I. Markelov, I. S. Kutuyev, R. I. Kolyasnikova, and Ye. D. Mokhir.)

Paton, B. Ye., B. I. Medovar, Yu. V. Latash, B. I. Maksimovich, and A. F. Tregubenko. Electroslag Remelting of Alloyed Steels and Alloys as an Effective Means for Improving Their Quality

118

Verbol'skaya, Ye. D., G. F. Zasetskiy, I. V. Isakov, and A. Ye. Khlebnikov. Various Methods of Treating Molten Chromium-Nickel-Molybdenum Steel and Their Effect on Its Properties

127

Yedneral, F. P. Application of Complex Deoxidizers for the Purpose of Shortening the Reduction Period of Electromelting of Constructional Steels

137

Yedneral, F. P. The Change in the Bath Composition of an Electric-

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18(5,7)
AUTHORS:

SOV/128-59-4-15/27
Zasetskiy, G.F., and Snakhnovich, V.A., Engineers

TITLE:

New Method to Study Solidification Processes

PERIODICAL:

Liteynoye Proizvodstvo, 1959, Nr 4, pp 34-35 (USSR)

ABSTRACT:

Under the methods to determine the peculiarities in the formation of the hard phase during the solidification process of castings, the authors special interest is directed to one method which is based on the introduction of radioactive isotopes into the fluid phase and their distribution in between the fluid and the hard phase. This method makes it possible to determine at any given moment the extent of the hard phase. It is also possible to trace a heterogeneous concentration. Although this method is not questioned in its value, it is applied only to a small extent as a result of the high costs connected with it. It was therefore decided (on a proposal of G.F. Zasetskiy) to introduce sulphur into the fluid phase in order to get a better knowledge of the solidification process. This method is based on the difference in the

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diffusion of sulphur in the fluid and in the hard phase, and also on the fact, that crystal sulphur combines with iron. The amount of sulphur in the iron indicates at any given moment from the beginning of the solidification, how thick the layer of the hard phase is. The amount of sulphur brought into the fluid phase should exceed the normal percentage of sulphur in the metal by 5 to 10 times. To bring the sulphur in the fluid phase of the casting it is necessary to keep the riser part of the casting in a fluid state. This is done by heating the casting. This method makes it possible to trace the development of the different stages in the solidification process. Furthermore the separating surface of the fluid and the hard phase, the dendrite structure on this surface, the metal flow in the fluid phase, and the influence of that flow on the formation of the microstructure of the cast can be determined. Figure 1 shows the outline of the layer in the hard phase, figure 2 shows

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traces of sulphur. The mathematical results will be described in a forthcoming paper. There are 2 photographs.

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VERBOL'SKAYA, Ye.D., inzh.; ZASETSKIY, G.F., inzh.; ISAKOV, I.V., inzh.;
KHLEBNIKOV, A.Ye., doktor tekhn.nauk

Treatment of molten steel by rare earth elements. Stal' 20 no.11:1030-
1033 N '60. (MIRA 13:10)
(Steel--Metallurgy) (Rare earth metals)

ZASITSKIY, V.

19049

USSR/Automobile Plants 4403.0500, 5405. Feb 1948

"Cost Accounting in Shops, Sections and Workers' Brigades," V. Zasetskiy, 4 pp

"V Pomeshch' FZMK" Vol IX, No 4

Profitable effects of cost accounting illustrated in specific workshops, sections and brigades of Moscow Automobile Plant imeni Stalin, Gor'kiy Automobile Plant imeni Molotov, Uralmash, Ural Aluminum Plant, and Second Moscow Clock Plant.

II

19049

ZASHCHBLKIN, V., kapitan dal'nego plaveniya

Don't needlessly encumber supplementary navigational calculations.
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ZASHCHEPIN, A.N., kandidat tekhnicheskikh nauk; ZEL'MANOVICH, M.S.,
kandidat tekhnicheskikh nauk; LUK'YANOV, N.K., inzhener.

[Over-all mechanization of concrete road construction] Kompleksnaia
mekhanizatsiia stroitel'stva tsementobetonnykh pokrytii. Moskva,
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